# XX. Falkland Islands Diptera. By C. G. LAMB, M.A., B.Sc., Clare College, Cambridge. Communicated by F. W. EDWARDS, F.E.S.

#### [Read October 18th, 1916.]

THROUGH the kindness of Mr. F. W. Edwards, of the British Museum, I have had the opportunity of examining a small collection of flies from the Falkland Islands. In part this collection was made by Mr. R. Vallentin in the years 1901–3; the remainder was collected by Dr. M. Cameron (of H.M.S. *Cornwall*) on Dec. 7, 1914, when he paid a hurried visit ashore the day before the naval engagement off those islands.

There are four species in the collection, of which three appear to be undescribed. The known species is the Borborid Antrops truncipennis described by Enderlein in Zool. Anz. Bd. xxxiv, p. 226, 1909. Specimens of this species were collected both by Vallentin and Cameron. One of the new species is a Phycodromid. Enderlein gives a conspectus of the genera of that family in the "Deutsche Südpolar. Expedition" (X. Zool. ii, 1909); according to his tables the species falls within the limits of the genus *Oedoparea*, though it is sufficiently distinct from the normal form of that genus to warrant generic rank should more related forms be discovered. The other two species are almost wingless forms closely allied to Scatella. Becker gives a beautiful figure of his Scatella brevipennis in "Belgica," Zool. Ins. (1906), Plate III; one of the new species must be very similar in appearance to that species, but on comparison distinct differences are visible : in particular Becker states that the costa plainly ends at the 3rd vein, thus fixing his species as a Scatella. In the new species the wings and venation are more reduced, and it is quite impossible to state whether they are to be considered as members of that genus or of Scatophila. When further stages of wing reduction come to light, the point may be settled, and it will probably be found that the relationships of the new species are to be sought for TRANS. ENT. SOC. LOND. 1916.—PARTS III, IV. (APRIL'17)

in Scatophila; meanwhile the generic name Synhoplos is proposed for these two new semiapterous Ephydrids.

The description of the new species is as follows :----

### Oedoparea oblita, n. sp.

As mentioned above, the three specimens of a Phycodromi may be provisionally placed in this genus. To facilitate description, the insect is compared with the well-known *Oedoparea buccata*, which very exceptionally reaches nearly the size of the present insect. To avoid repetition of name the contrasting characters of the latter species are placed in square brackets, thus [].

 $\bigcirc$ . Head: top view:—frons quite flat with no ocellar tubercle, widening slightly to the overhanging forehead, all dull orange, darker in front, with a long pointed orange frontal triangle extending  $\frac{2}{3}$  the distance to the forehead, and including in it a small ocellar triangle [only an ocellar triangle]; the front half of the frons is covered with tiny bristles [bristles few and scattered]; hind eye margins broad, two orbital bristles with tiny ones between [three orbitals on grey borders], divergent ocellars inserted on lines joining the ocelli, parallel inner verticals, divergent outer, and post-verticals just behind the line formed by the bases of the vertical pairs.

Front view:—the frons runs on into the cheeks, both being demarcated from the face by the lunule and by side furrows extending to the upper mouth margins; the face is orange, covered with silvery hairs and contracted below [broader in *buccata*]; the grey upper lip projects; palpi very stout, orange and covered with dark hairs [less hairy], the ridged yellow tongue is well visible. The arched side furrows of the face form two well-marked shallow antennal foveae; the antennae are separated at the base by a nose projecting below the lunula : they are all orange, 1st joint somewhat orbicular, with tiny black bristles; 2nd joint calyciform, bristled, especially below inside, 3rd joint flattened orbicular, darker, but covered with silvery pollen; arista practically bare, a little longer than whole antennal length, awn-like, the basal joints stout, the second coneing into the flagellum.

Side view :—profile rather like *buccata*, but while the latter has a median nose, broad and slightly convex in profile, the present species has a distinctly concave profile, and hence the forehead appears more prominent. Eyes bare, rather oval, the long axis sloping from vertex to check, with the sharpest curvature at the upper end of this axis [eyes much more nearly round]; jowl as deep

## Falkland Islands Diptera.

as the eye, yellow-orange in colour, as is the side of the face, and both covered with bristly hairs [fewer hairs, hind jowls bare]; the hind head runs into the jowls smoothly and continuously [hind head eut off from hind jowls by a furrow]; post-orbital row present above.

Thorax :—the dorsum is dull grey, pollinated, and eovered with fine bristles; humeri greyish orange; the bristles are, humeral (with accessory hairs) in a line with the two notopleurals, presutural, one supra-alar, a row of 8 bordering the hind margin of thorax, of which one is on the post-alar callus, two are the true prescutellars (small and close together), and between the post-alar and prescutellar is another bristle; this is possibly the last of a true dorso-

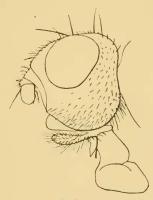


FIG. 1.—Oedoparea oblita.

eentral row of which (1 + 2) others can just be seen projecting somewhat among the scattered bristles [has a similar chaetotaxy, but the dorso-central row is more developed, and the general clothing bristles are very much longer]; scutellum as thorax, rounded, pale edged with a few scattered bristles except on the centre of the dise, a pair of stout upright terminal bristles and smaller convergent basal pair [no small diseal bristles]. The pleura is grey with fine orange pollen, mesopleura bare, a bristle below the stigma, sternopleura with 3 bristles close to upper suture and covered with very long curly hairs which are dark basally but otherwise orange [less hairy on sternopleura]. The wings have a similar form to *buccata* in venation, structure, relative size and form, but are stouter in texture, they are somewhat milky with pale veins except for a slight suffusion on the cross veins. Calypters pale yellow with short pale hairs. Halteres pale yellow, same in form as in *buccata*. Legs principally orange. Front: coxa greyish with bristles in front; femur rather swollen in the middle with long orange hairs, no bristles; tibia swollen for its distal half, also covered with long soft hairs, a long front preapical bristle; tarsus with 1st joint about as long as the next three, the last joint larger, all bristly, the bristles getting longer towards the end, claws stout and black, pads pale, a long black bristle for empodium. Middle: similar to front pair, but the tibia has a very strong crown of spines, and the tarsal bristles are stouter. Hind: similar, but the femur and tibia are but little swollen and are longer, a crown to tibia, and a large long hind preapical; tarsi with usual golden pads [clothing bristles shorter and more bristly, without the long soft hairs].

Abdomen, grey with fine whitish pollen, covered with small hairs, except for the penultimate segment which has long hairs.

Length about  $7\frac{1}{2}$  mm.

Wing about 6 mm.

Collected by R. Vallentin, 1902–3. Types in British Museum.

#### SYNHOPLOS, gen. nov. (Ephydridae).

This genus is related to *Scatella* and *Scatophila*, having a very similar facies, but it is almost wingless in both sexes. The face has a very pronounced median ridge carrying a knob, and this ridge forms deep-set side furrows which receive the antennae. These latter have a very bristly second joint, and the arista is distinctly, though shortly, pectinate; eyes irregularly oval; jowls deep; the lower lip is rather short, and does not close the oral aperture completely; the chaetotaxy is somewhat like that of *Scatella*, but the dorso-central and acrostichal bristles are irregular; the scutellum has four bristles, the end two being long, upright and crossed. A rather noticeable feature is that the notopleura turns somewhat into the dorsal plane, and is comparatively feebly developed, owing to the feeble wing musculation.

#### Synhoplos sturdeeanus, n. sp.

3. *Head*: top view:—broader than the thorax and about  $\frac{1}{2}$  as deep as broad, the forehead margin almost straight; the frons is very broad, roughly square, the front ocellus is nearly in the middle of the frons, all three ocelli are extremely minute and lie nearly in an equilateral triangle. The frons is dark grey, with

# Falkland Islands Diptera.

broad pale silvery eye margins, and with an ill-defined leaf-shaped darker area enclosing the ocelli, whose point nearly reaches the forehead. Surrounding this leaf the frons is broadly paler than the remainder of its surface (and shows ochroous in a side light), so that a darker triangle is left each side bounded by the eye margin, the forehead, and a line from forward vertical bristle to



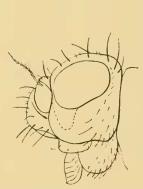


FIG. 2.—Synhoplos sturdeeanus.

FIG. 3.—Synhoplos sturdeeanus.

nearly the centre of the forehead. The chaetotaxy is as follows : ocellar bristles divergent, inserted just outside middle of line joining ocelli; forward vertical bristles on middle of wide eye margins converging to centre, long hind verticals somewhat divergent but straight; two large orbital bristles each side overhanging eyes, with a preceding, intermediate and following smaller bristle. Other smaller bristles are as follows: a row of some six bristles on sloping boundary of black triangle mentioned above, the front ones longest and strongly eonverging to centre; a clump of fine bristles exists between the hind ocelli and the vertex; the upper bristles of the rather irregular post-orbital row are visible, and are continued by 2 or 3 small bristles behind the hind verticals.

Front view :--vertex arched with no sign of any hump; eves slightly prominent; mouth edge straight with about 5 long stont fringing bristles each side; the nose starts with a silver base level with second antennal joints, and suddenly becomes prominent at that point, it then widens, and sweeps each side into the mouth margin, it is mainly orange but grades into the grey mouth margin; the nose bears a diverging row of 4 bristles each side and has much smaller scattered ones on its surface; the lines of main bristles curve round so that the very large bristles on the cheeks below the antenna form their terminations. The whole face is distinctly pollinated. The antennae being turned rather sideways beside the nose are best seen in this view, the first joint forms a small elongate knob embracing the base of the second joint; this is oval, smooth, with a few small bristles on the surface and a long dorsal one; the visible part of the third joint is also oval, densely but obscurely pilose and darkened at tip; otherwise the whole antenna is orange. The arista is thick at base, then tapered, with about 7 feathers; its whole length is a little greater than the whole antennal length.

Side view :- the greatly protuberant nose is very evident, as is the deep antennal groove, and a deep furrow in front of the eye, with a long facial bristle forward of it. The eyes are oval, with the longer axis oblique and sloping downwards from behind to front: the boundary is regularly curved, the upper margin with a shorter radius than the lower: the ends of the longer axis also smoothly curved, the upper having larger radius than the lower. The whole of the side of the face is grev with some silvery pollen. The hind jowls towards the back of the head carry many palish decumbent bristles, longer below. The post-orbital bristle-row extends halfway down, and there are a few accessory bristles behind it. It ean be seen that the second antennal joint is rather swollen and is practically smooth behind. The lower lip is grey, swollen and hairy, and the ridged orange tongue protrudes from it: the palpi are orange, stout, rather flattened in the vertical plane and bristled. On looking into the mouth, the true lip is seen to be cut off from the outer mouth margin by a deep encircling furrow.

Thorax:—the general colour is silvery grey, due to very minute dense pollen, with very faint bluish and bronzy reflections; there are rather irregular rows of small bristles, some of which form the irregular double acrostichal rows, others the dorso-centrals; in the latter the presutural and prescutellar dorso-centrals are true macrochaetae. There are two or three small humerals, a bristle (presutural) just before the V-shaped cross furrow at the side, two notopleurals on the much-abbreviated notopleura, and one supra-alar; between all are the small bristles. The scutellum is slightly rounded with a shallow furrow in front, the terminal bristles are large, upright and crossed at tip, each side is a smaller rather depressed bristle. The pleura is silvery grey, more orange below; it is covered with small scattered bristles and has a large mesopleural bristle, and there is a large sternopleural one.

The *wings* are reduced to small pointed orange flaps with short stout bristles, the thoracie squama is present, though minute. The halteres are reduced to stout orange rods.

The *legs* are bright orange, stout, and profusely covered with bristles, all the femora and coxae are rather pollinated with silver; the only stout bristles are inferior crowns to mid and hind tibiae, and a pair beneath each tarsal joint. The 1st tarsal joints of all the feet are rather shorter than the rest of the feet, and have inferiorly a dense pile of stout orange bristles. The last joints are rather flattened and have long dorsal hairs, very stout curved claws, delicately feathered pads, and a long empodium of several fine hairs.

Abdomen :---long----oval with rounded end : in colour it is silverygrey like the rest of the insect, but has rather ill-defined brown marks as follows : smallish side spots on 2 and 3, a large median oval spot on 1, a central V on 2 extended almost aeross segment, a similar rather larger and more slender V on 3. The segments 1, 2, 3 are about equal, but 4 is about  $1\frac{1}{2}$  times as long. The whole surface is covered with bristles which are reddish in certain lights, the marginals are black and longer. In side view the end is cut off obliquely, the 5th segment has a very large terminal pit which hides the complex genitalia.

Length about  $2\frac{1}{4}$  mm.

Wings about 3 mm.

 $\bigcirc$ . Very like the male except that the abdomen is longer and the segments are all equal, the brown marks are reduced to very indistinct central spots: the lower part of last abdominal segment carries a pair of very stout curved claws.

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Collected by Dr. M. Cameron, R.N., in 1914. Co-types in the British Museum.

#### Synhoplos neglectus, n. sp.

This species is somewhat larger than the last, and is very much more bristly and robust in appearance. TRANS. ENT. SOC. LOND. 1916.—PARTS III, IV. (APRIL'17) D D *Head*: top view:—shape and general character like the last species, but the whole is dark blackish brown, the eye margin being somewhat more brown: the central area is scarcely differentiated from the rest. The chaetotaxy is the same, though stouter.

*Head*: front view:—same as last, but the colour is altogether darkened grey, much less orange. The antennae are similar, but ochreous grey in colour, the 3rd joint being quite grey.

Side view :—much as last, but there is no very evident furrow behind the check-bristle : the sides are grey and silvery, and the hind jowls bear short black bristles. The remainder of the side is much like the last species, but the orange colour is far less distinct. The eyes slope similarly, but they are somewhat different in outline, being rather pointed below in front, the radius of curvature of the boundary being very small.

Thorax:—the general colour is dull brown-black, the upturned notopleurae are orange, so that they form two irregular orange side stripes. The small dorsal bristles are arranged somewhat like the last, but much longer and more evident. The dorso-central rows are more marked, as there is a mid-bristle pair as well as the front and hind pairs : the other bristles are the same, but longer and stouter. The scutellum is similar, and bears two very long upright crossed bristles and the usual two small accessory side ones. The pleura is darkened orange, bristled as last.

The *wings* are reduced to hairy strips, they are proportionately a little longer than in the last species, being about equal in length to two-thirds the distance from the root to the humerus.

The *legs* are similar to the last, darkened orange and a little more stoutly haired.

The *abdomen*: this shows a striking difference in colour, etc.: it is all very dull dark black-brown, almost black; it is uniformly and densely covered with tiny adpressed bristly hairs. In outline the shape is similar to the last, being widest at the end of the 2nd segment. The 1st, 2nd and 3rd segment have their axial length the same; the 4th is about twice as long. The last is only just visible dorsally, but on side view it is seen to be long and rather narrow, its axis being about  $60^{\circ}$  to the body axis. This segment ends in a papilla bearing a bunch of orange hairs, at the base of the 4th segment are two strong chitinous hooks. If the 5th segment be viewed from behind, it is seen to bear a rounded triangular patch which is paler haired, and is well marked off from the rest by a definite sunk boundary: it looks like a little segment glued on to the 5th. In the first species these structures cannot be seen as the whole apparatus is withdrawn in all three specimens.

The female differs from the female of the last species in the

same way as the males differ, the abdomen being dull brown-black. The terminal hooks are not visible.

Length  $3\frac{1}{2}$  mm.

Wing a little more than  $\frac{1}{2}$  mm.

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5 33, 8 9 9. Collected by Vallentin in 1902–3. Types in British Museum.